Patients who consult with tiredness: frequency of consultation, perceived causes of tiredness and its association with psychological distress

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SUMMARY

Background. *Few prospective studies have been carried out in primary care on patients presenting with tiredness.*

Aim. *A study was undertaken to describe patients whose main complaint was fatigue or of being 'tired all the time'.*

Method. *Over one year, doctors in four practices in Lancashire, Mid-Glamorgan, Suffolk and Surrey recruited 220 patients aged 16 years or more presenting with fatigue, and matched them with a comparison group from their lists. The general health questionnaire, a fatigue questionnaire and an attribution questionnaire were used to measure outcomes over six months. General practice records of consultations were also examined.*

Results. *Patients consulting for tiredness attended the doctor significantly more frequently than the comparison group both in the six months before and after entering the study. The frequency of attending could not be related to the duration or severity of fatigue alone. The majority consulting with tiredness scored highly on the general health questionnaire but so also did patients with equivalent fatigue scores in the comparison group. The correlation between fatigue and general health questionnaire scores was closer for those patients who still had high fatigue scores six months later than it was for patients on entry to the study. Six months following study entry 61% of patients perceived the cause of the tiredness to be physical, while 57% of doctors viewed the problem as psychological. A small number of patients changed their views during the six months follow up from physical to psychological attributions.*

Conclusion. *Patients consulting for tiredness are likely to report symptoms of psychological distress and attend more frequently than other patients. They tend to view their problem as physical while their doctors view the problem as psychological. Having established that there is no physical problem, doctors may need to focus more on sharing ideas and explanations when patients complain of being 'tired all the time'.*

Keywords: fatigue; consultation rates; health status; causal factors.

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Introduction

A 10-MINUTE appointment that begins with 'Doctor, I'm feeling tired all the time...' may seem like opening up Pandora's box. Jerrett wrote that the complaint of fatigue is considered a 'heart sinker'.[1] Part of the reason for this may be the non-specificity of the symptom, which can signify many disorders. Within physical medicine the diagnostic possibilities range from common anaemia, through rare myasthenia gravis, to life threatening neoplasia. Fatigue is also a symptom of psychosocial dysfunction, and may be associated with stress, depression, or simple lack of sleep. Differential diagnosis and advising about prognosis is difficult, especially as there is a dearth of evidence derived from prospective studies of patients presenting to general practitioners with fatigue. Some evidence is available from specialist centres, but Morrell found that fewer than 2% of patients with fatigue were referred to hospitals.[2] In view of this lack of information a case series of patients in general practice was collected, and their laboratory findings and outcome at six months reported.[3]

Mechanic introduced the concept of illness behaviour to describe the way in which 'individuals monitor their bodies, define and interpret their symptoms... and utilize sources of help...'.[4] Psychiatrists have developed the contrasting idea of abnormal illness behaviour,[5] and this is related to the general practice concept of frequent attenders.[6] In North America, Valdini and colleagues[7] and Cathebras and colleagues[8] compared the consultation frequency of patients reporting fatigue with the consultation rate of patients attending for other problems. Valdini's team found that fatigued patients consulted more frequently, while Cathebras' team found no difference between the two groups.

Tiredness is ubiquitous in all social classes but especially among manual workers.[9] It is more common among women than men, particularly when they have children aged under six years.[10] This tiredness can be expected as young women with families work, or have family responsibilities for, on average, 77 hours a week.[11] When doctors in one practice asked women patients to record all their symptoms in diaries, on average only one consultation was initiated for over 400 episodes of fatigue recorded.[12] Higher anxiety levels led to more symptoms being recorded and higher levels of attendance with the doctors.[12]

Tylee and colleagues found that tiredness was more prevalent in a group of women patients whose depression was not recognized by their doctors than among those women whose depression was recognized.[13] The women whose depression was not recognized by their doctors were also less likely to recognize their own mood as being depressed. In a study of hospital patients with chronic fatigue Powell and colleagues found that a high proportion were depressed, but their sense of self-worth was preserved when compared with patients hospitalized for depression.[14] The investigators suggested that somatic symptoms may

serve to protect some patients from the loss of self-esteem associated with psychological illness.

Pendleton and colleagues stated that the first task within the consultation is to define the reason for the patient's attendance, which includes finding out the patient's ideas.[15] This task is linked to the fourth task they proposed, which is to achieve a shared understanding of the problem. Tuckett and colleagues analysed a group of doctors' consultations.[16] They found that the doctors did little to encourage patients to present their views. Quite often doctors actively evaded patients' ideas, and women were twice as likely as men to have their ideas evaded. When doctors failed to elicit patients' ideas and achieve a shared view, patients were less likely to be satisfied or to accept the doctor's explanation or advice.

The aims of this study were to:

- compare the consultation frequency of patients complaining of tiredness with an age–sex matched group not consulting with tiredness;
- establish whether the consultation frequency of patients with tiredness could or could not be related to the fatigue symptoms before or after study entry;
- examine the relationship between fatigue symptoms and symptoms of psychological distress in patients when they first consulted and six months later, and compare this with the association between fatigue and psychological distress among patients not consulting the doctor;
- describe the patients' perceptions of the cause of their tiredness on entry to the study and six months later; and
- compare the patients' and doctors' perceptions of the cause of tiredness at six months.

Method

The methodology used in this study has been described previously.[3] Doctors in four practices in Lancashire, Mid-Glamorgan, Suffolk and Surrey (combined list size 21 240) recruited patients over one year if the patient's main reason for consulting was fatigue or synonyms like 'being knackered', 'lethargic', 'run down' or 'tired all the time'. Patients must have had the symptom for at least two weeks and have been aged 16 years or more. When a patient was recruited, a person of the same sex and the nearest younger by date of birth was selected from the same practice register. If this patient was found to have moved away or died, the subsequent patient was chosen.

When patients presented with fatigue, they completed a questionnaire about their perception of the cause of the problem using a structured format described by Wessely and Powell.[17] The response categories were 1 = completely physical, 2 = mainly physical, 3 = mixed, 4 = mainly psychological, 5 = completely psychological. In the analysis, responses one and two indicating physical or mainly physical attributions were combined, as were responses four and five indicating mainly psychological or psychological attributions. Six months later patients who had presented with tiredness and their doctors were asked independently to complete the structured form indicating their idea about the cause of the fatigue symptom.

Patients were also asked to complete a 14-item fatigue questionnaire[18] and the 12-item general health questionnaire on entry to the study, and at an appointment two weeks later.[19] They were subsequently sent the fatigue and psychological questionnaires on two more occasions two and six months after the first visit. The general health questionnaire measures symptoms of psychological distress and does not include any questions about bodily symptoms such as fatigue. Scores of four or more on the fatigue questionnaire[18] and three or more on the general health questionnaire[19] had been found to give the best sensitivity and specificity when questionnaire responses were compared with results using standardized interviews.

Women patients were asked how many children they had aged under 10 years on entry to the study. Patients in the comparison group were sent the same fatigue and psychological questionnaires as those completed by the patients with fatigue on one occasion only.

Consultation frequency for both groups of patients in the six months before and after entry to the study was determined from the practice records.

Analysis

Tests used were a test of proportions for both paired and unpaired samples, Mann Whitney, Kruskal-Wallis, Wilcoxon test for matched samples, Spearman's rank correlation, and the Kappa statistic.[20] When cross tabulations were undertaken the denominator changed slightly because of missing values, and therefore each denominator is stated for the data provided.

Results

A total of 220 patients complaining of fatigue were admitted to the study in 1990–91. An equal number of age–sex matched patients were identified from the doctors' lists, 200 of whom returned completed questionnaires. When written to six months later 172 (78.2%) of the patients who had complained of fatigue returned their questionnaires.

Characteristics of the patients and comparison group

Fifty six of the patients consulting for fatigue were men (25.5%) and 164 were women (75.5%). The mean age was 43 years, range 17 to 88 years. There was no significant difference between the proportion of women patients reporting tiredness who had one or more child aged under 10 years (29/150) and the proportion with young children in the comparison group (27/142).

Consultation frequency

The mean number of consultations in the six months before joining the study for patients with fatigue was 3.1 (95% confidence interval (CI) 2.6 to 3.5) and for the matched comparison group 1.8 (95% CI 1.5 to 2.1). As the distribution of consultation frequency was skewed, medians were compared for cases and the matched comparison group, using the Wilcoxon test. In the six months before entering the study, patients complaining of fatigue consulted significantly more frequently than the comparison group ($P<0.001$). Excess consultation frequency might have been accounted for by symptoms of fatigue prior to study entry. To test whether the median consultation frequency during the six months before entry was significantly different among those whose duration of fatigue was different (less than one month, 1–3 months, 4–6 months, more than six months) a Kruskal-Wallis test was applied. No significant difference in the medians was found.

In the six months after entry to the study patients with fatigue consulted a mean of 4.2 times (95% CI 3.7 to 4.6) compared with 1.6 (95% CI 1.3 to 1.9) for patients in the comparison group. Thus, patients with fatigue consulted significantly more frequently than the comparison group (Wilcoxon test, $P<0.001$). As the study design required the doctor to initiate one return visit, this was subtracted, and the group medians were compared; the difference was still significant (Wilcoxon test, $P<0.001$). To test whether the fatigue symptoms six months after entry to the study explained consultation frequency during this period, Spearman's rank correlation test was applied; no significant correlation was found between fatigue scores and consultation frequency.

Relationship between fatigue symptoms and symptoms of psychological distress

When patients had a score of four or more on the fatigue scale, they were likely to score three or more on the general health questionnaire. On admission to the study 154 of the 195 consulters who had high fatigue scores (79.0%) also had high general health questionnaire scores. Fifty out of the 71 patients in the comparison group who had high fatigue scores also had high general health questionnaires scores (70.4%). Patients consulting with tiredness did not differ significantly from non-consulters with fatigue in the percentage having high general health questionnaire scores. The correlation between fatigue and psychological distress was closer for non-consulters (r_s= 0.70, 95% CI 0.62 to 0.76) and those consulters who still had high fatigue scores at six months (r_s= 0.68, 95% CI 0.59 to 0.75) than it was for fatigued patients on entry to the study (r_s= 0.47, 95% CI 0.36 to 0.57).

Patients' and doctors' perceptions of the causes of fatigue

Data on patients' perceptions of the cause of fatigue are presented only where they were available for the same patients both on entry and at six months (Table 1). Over six months some patients modified their views, from interpreting the problem as physical to interpreting it as psychological. Using the test for paired proportions the difference in percentages was not statistically significant.

Doctors' and patients' perceptions of the causes of fatigue at six months are shown in Table 2 (data presented only where available about the same consultation for tiredness from both patients and doctors). In 49 cases (31.0%) doctors and patients agreed on the cause of the tiredness. Most patients (60.1%) reported the cause of the tiredness to be physical while 57.0% of doctors considered it psychological. When the three category distribution of responses was analysed there was poor agreement between patients and their doctors in describing the cause of the tiredness (weighted kappa 0.08, 95% CI –0.01 to 0.16).

The lack of agreement between doctors and patients was also clear in the qualitative comments they made when asked to write down the cause of the tiredness. For example, one doctor wrote of a patient 'psychological — marital problems, on a diet' while the same patient wrote 'this is not in my mind...'. Some patients acknowledged psychosocial difficulties, such as 'caring for mother... invested in Barlow Clowes'. Doctors and patients occasionally made attributions in unexpected directions, for example one doctor attributed the tiredness in one patient to 'overwork... four children' while the same patient stated it was 'all in the mind'.

Table 1. Patients' perceptions of the causes of their fatigue after the first consultation and six months later.

Cause of fatigue	% of 159 patients perceiving cause of fatigue	
	On entry	6 months later
Physical[a]	*69.2*	*61.0*
Physical/psychological[b]	*21.4*	*23.3*
Psychological[c]	*9.4*	*15.7*

[a]Corresponds to score of one or two. [b]Corresponds to score of three. [c]Corresponds to score of four or five.

Table 2. Patients' and doctors' perceptions of the causes of fatigue six months after their consultation together.

Doctors' perception	No. of patients perceiving cause of fatigue			
	Physical[a]	Physical/psychological[b]	Psychological[c]	Total
Physical[a]	25	2	5	32
Physical/psychological[b]	23	8	5	36
Psychological[c]	48	26	16	90
Total	96	36	26	158

[a]Corresponds to score of one or two. [b]Corresponds to score of three. [c]Corresponds to score of four or five.

Discussion

In this study patients with tiredness consulted significantly more frequently than an age–sex matched comparison group drawn from the doctors' lists. Doctors' responses to patients' illness behaviour is likely to be affected by their system of work and remuneration. Doctors who work on a capitation basis may be more likely to construe frequent attenders as problem patients than doctors who work on a fee for service basis. In the National Health Service general practitioners work a mean of 73 hours a week,[21] the time available per patient is shorter than in many developed countries,[22] and doctors themselves feel stressed and lacking support.[23] In this context frequent attenders with fatigue may get short shrift.

In this study of patients who consulted with fatigue the majority reported symptoms of psychological distress. Patients with equivalent levels of fatigue in the comparison group also reported psychological distress. Ingham and Miller interviewed a group of patients with fatigue in the community.[24] They found many had consulted a doctor in the past, and had chronic fatigue. It seems likely that psychological distress is associated with fatigue, particularly chronic fatigue, and not necessarily with consulting for fatigue. A longer time course may selectively identify patients for whom tiredness is associated with a psychological condition like depression. This hypothesis is supported by the finding that patients with a longer duration of fatigue on entry to the study were also more likely to have a history of anxiety or depression.[3]

After two or more consultations with their doctor the majority of patients with fatigue continued to believe that their problem was a physical one. Wessely studied the perceptions of patients in tertiary care as to the causes of their fatigue and this was reported by McDonald and colleagues.[25] Of 47 patients, 80% perceived the cause to be physical, 12% mixed, and 8% psychological. Therefore, the patients seen by Wessely in tertiary care were more likely to perceive their illness as physical in origin. However, these percentages were not significantly different from those for patients on entry to this study in primary care. The percentage of patients in this study who made physical attributions declined six months later. This group seen in primary care were then significantly less likely to view their fatigue as being a physical problem than Wessley's patients seen in tertiary care (difference 19%; 95% CI 6% to 25%). This may reflect a selection process whereby patients who hold physical attributions without a physical diagnosis having been made being more likely to be referred on to a specialist.

Six months after entering the study there was poor agreement between doctors and patients as to the cause of the fatigue. Doctors did make a physical diagnosis in 20% of the patients, but in the remainder they may have interpreted the lack of agreement as a feature of somatization on the patient's part.

The evidence from this study supports an holistic approach to patients presenting with tiredness in general practice. The findings support the potential role for general practitioners to help patients to make sense of their symptoms, described by Goldberg and colleagues.[26] Doctors who have the skill, time and energy

may help some patients reattribute symptoms which may prevent unnecessary referrals and medicalization.

References

1. Jerrett WA. Lethargy — cause or effect? *Physician* 1984; **2:** 628-630.
2. Morrell DC. Symptom interpretation in general practice. *J R Coll Gen Pract* 1972; **22:** 297-309.
3. Ridsdale L, Evans A, Jerrett W, *et al.* Patients with fatigue in general practice: a prospective study. *BMJ* 1993; **307:** 103-106.
4. Mechanic D. The concept of illness behaviour. *J Chron Dis* 1962; **15:** 189-194.
5. Pilowsky I. Abnormal illness behaviour. In: Henderson AS, Burrows GD (eds). *Handbook of social psychiatry.* Amsterdam, Netherlands: Elsevier, 1988.
6. Courtenay MJF, Curwen MF, Dawe D, *et al.* Frequent attendance in a family practice. *J R Coll Gen Pract* 1974; **24:** 251-261.
7. Valdini AF, Steinhardt S, Valicenti J, Jaffe A. A one-year follow-up of fatigue patients. *J Fam Pract* 1988; **26:** 33-38.
8. Cathebras PJ, Robbins JM, Kirmayer LJ, Hayton BC. Fatigue in primary care: prevalence, psychiatric comorbidity, illness behaviour, and outcome. *J Gen Intern Med* 1992; **7:** 276-286.
9. Cox B, Blaxter M, Buckle A, *et al. The health and lifestyle survey.* London: Health Promotion Research Trust, 1987.
10. Popay J. 'My health is all right, but I'm just tired all the time': women's experience of ill health. In: Roberts H (ed). *Women's health matters.* London: Routledge, 1992.
11. Oakley A. *The sociology of housework.* London: Pitman, 1974.
12. Banks MH, Beresford SAA, Morrell DC, *et al.* Factors influencing demand for primary care in women aged 20-44 years: a preliminary report. *Int J Epidemiol* 1975; **4:** 189-195.
13. Tylee AT, Freeling P, Kerry S. Why do general practitioners recognize major depression in one woman patient yet miss it in another? *Br J Gen Pract* 1993; **43:** 327-330.
14. Powell R, Dolan R, Wessely S. Attributions and self esteem in depression and chronic fatigue syndromes. *J Psychosom Res* 1990; **34:** 665-673.
15. Pendleton D, Schofield T, Tate P, Havelock P. *The consultation: an approach to learning and teaching.* Oxford University Press, 1984.
16. Tuckett D, Boulton M, Olson C, Williams A. *Meetings between experts: an approach to sharing ideas in medical consultations.* London: Tavistock Publications, 1985.
17. Wessely S, Powell R. Fatigue syndromes: a comparison of chronic 'post viral' fatigue with neuromuscular and affective disorders. *J Neurol Neurosurg Psychiatry* 1989; **52:** 940-948.
18. Chalder T, Bevelowitz G, Pawlikowska T, *et al.* Development of a fatigue scale. *J Psychosom Res* 1993; **37:** 147-153.
19. Goldberg D, Williams P. *A user's guide to the general health questionnaire.* Windsor: NFER-Nelson, 1988.
20. Altman DG. *Practical statistics for medical research.* London: Chapman and Hall, 1991.
21. Ridsdale L. General practitioners' workload. *BMJ* 1990; **301:** 455-456.
22. Sandier S. Health services utilization and physician income trends. In: Organization for Economic Cooperation and Development. *Health care systems in transition: the search for efficiency.* Paris, France: OECD, 1990.
23. Sutherland VL, Cooper CL. Job stress, satisfaction, and mental health before and after introduction of new contract. *BMJ* 1992; **304:** 1545-1548.
24. Ingham JG, Miller PMc. Symptom prevalence and severity in a general practice population. *J Epidemiol Community Health* 1979; **33:** 191-198.
25. McDonald E, David AS, Pelosi AJ, Mann A. Chronic fatigue in primary care attenders. *Psychol Med* 1993; **23:** 987-998.
26. Goldberg D, Gask L, O'Dowd T. The treatment of somatization: teaching techniques of reattribution. *J Psychosom Res* 1989; **33:** 689-695.

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